In the claims:

For the convenience of the Examiner, all claims being examined, whether or not amended, are presented below.

Please cancel, without prejudice, claims 15-21, 34, 36-47, 51-55, 64, 66, 70-73.

1. **(Currently amended)** A pharmaceutical composition that provides an elastin-based composition for localized delivery in vivo, said elastin-based composition comprising a polypeptide, wherein said polypeptide comprises (i) an amino acid sequence at least 95% ~~90%~~ identical to SEQ ID NO: 3, (ii) a bioactive fragment of SEQ ID NO: 3 that includes ~~one to~~ six or seven repeats of a hexameric sequence represented by SEQ ID NO: 1, or (iii) a peptide fragment consisting essentially of ~~one to~~ six or seven repeats of the hexameric sequence represented by SEQ ID NO: 1, wherein said elastin-based composition is attached to a biocompatible support or dissolved in a biocompatible matrix and has one or more biological activities selected from the group consisting of:

a) inhibiting the proliferation of smooth muscle cells in vivo;

b) stimulating the differentiation of smooth muscle cells in vivo;

c) regulating the migration of smooth muscle cells in vivo; and

d) binding to smooth muscle cells, and

wherein said elastin-based composition has an IC50/EC50 for at least one of said biological activities that is less than or equal to 10^{-3}.

2. **(Original)** The pharmaceutical composition of claim 1 wherein said elastin-based composition is soluble and has an IC50/EC50 for each of said one or more biological activities that is less than or approximately equal to 10^{-3}.

3. **(Previously presented)** The composition of claim 1 or 2 wherein said IC50/EC50 is greater than 10^{-15}.

4. **(Original)** The composition of claim 1 wherein said pharmaceutical composition provides a dose of said elastin-based composition equivalent to 10^{-8} M of a peptide having the amino acid sequence of SEQ ID NO:2 at said target site.

5. **(Withdrawn)** The composition of claim 1 wherein said pharmaceutical composition comprises an expression vector encoding a tropoelastin or a fragment thereof.

6. **(Previously presented)** The composition of claim 1 wherein said elastin-based composition comprises a recombinant polypeptide.

7. **(Previously presented)** The composition of claim 1 wherein said elastin-based composition comprises a synthetic peptide.

8. **(Currently amended)** The composition of claim 7 wherein said synthetic peptide comprises ~~at least two~~ six repeats of the hexameric sequence Val-Gly-Val-Ala-Pro-Gly (SEQ ID NO: 1).

9. **(Currently amended)** The composition of claim 7 ~~8~~ wherein said synthetic peptide comprises ~~6~~ seven repeats of the hexameric sequence Val-Gly-Val-Ala-Pro-Gly (SEQ ID NO: 1).

10. **(Original)** The composition of claim 1, wherein said elastin-based composition is crosslinked, precipitated, or coacervated.

11. **(Original)** The composition of claim 1 wherein said elastin-based composition comprises an elastin matrix produced from a blood vessel.

12. **(Previously presented)** The composition of claim 1 wherein said elastin-based composition is attached to a biocompatible support or biocompatible matrix.

13. **(Previously presented)** The composition of claim 12 wherein said biocompatible support or biocompatible matrix comprises a tube.

14. **(Previously presented)** The composition of claim 13 wherein said elastin-based composition is attached to an outer surface of said tube and additionally comprises a sheath encircling said tube.

15-21. **(Cancelled)**

22. **(Currently amended)** A method for prophylaxis or treatment of a disorder having diminished capacity to regulate smooth muscle cell function comprising delivery of the elastin-based composition provided by the pharmaceutical composition of any of claims ~~claim~~ 1, 60 or 67 to a ~~said~~ site of diminished capacity to regulate smooth muscle cell function, wherein said disorder is restenosis.

23. **(Previously presented)** The method of claim 22 wherein said IC50/EC50 is greater than about 10^{-15}.

24. **(Original)** The method of claim 22 wherein said pharmaceutical composition provides a dose of said elastin-based composition equivalent to 10^{-8} M of a peptide having the amino acid sequence of SEQ ID NO:2 at said target site.

25. **(Withdrawn)** The method of claim 22 wherein said pharmaceutical composition comprises an expression vector encoding a tropoelastin or a fragment thereof.

26. **(Previously presented)** The method of claim 22 wherein said elastin-based composition comprises a recombinant polypeptide.

27. **(Previously presented)** The method of claim 22 wherein said elastin-based composition comprises a synthetic peptide comprising 6 repeats of the hexameric sequence Val-Gly-Val-Ala-Pro-Gly (SEQ ID NO: 1).

28. **(Original)** The method of claim 22 wherein said elastin-based composition is crosslinked, precipitated, or coacervated.

29. **(Original)** The method of claim 22 wherein said elastin-based composition comprises an elastin matrix produced from a blood vessel.

30. **(Previously presented)** The method of claim 22, wherein said elastin-based composition is attached to a biocompatible support or a biocompatible matrix.

31. **(Previously presented)** The method of claim 30 wherein said biocompatible support or biocompatible matrix comprises a tube.

32. **(Currently amended)** The method of claim 22 wherein said target site is located in the cardiovascular system and is suspected or known to be at risk for restenosis ~~disease~~.

33. **(Original)** The method of claim 22 wherein delivery comprises intravascular delivery of said elastin-based composition directly to a vascular site.

34. **(Cancelled)**

35. **(Original)** The method of claim 22 wherein said elastin-based composition is delivered to and maintained at said site.

36-47. **(Cancelled)**

48. **(Currently amended)** The pharmaceutical composition of claim 1, wherein said elastin-based composition comprises a polypeptide comprising (i) an amino acid sequence ~~at least 95%~~ identical to SEQ ID NO: 3, (ii) a bioactive fragment of SEQ ID NO: 3 that includes ~~one to~~ six or seven repeats of a hexameric sequence represented by SEQ ID NO: 1, or (iii) a peptide fragment consisting essentially of ~~one to~~ six or seven repeats of the hexameric sequence represented by SEQ ID NO: 1, wherein said elastin-based composition is attached to a biocompatible support or dissolved in a biocompatible matrix and has one or more biological activities selected from the group consisting of:

a) inhibiting the proliferation of smooth muscle cells in vivo;

b) stimulating the differentiation of smooth muscle cells in vivo;

c) regulating the migration of smooth muscle cells in vivo; and

d) binding to smooth muscle cells, and

wherein said elastin-based composition has an IC50/EC50 for at least one of said biological activities that is less than or equal to 10^{-3}.

49. **(Currently amended)** The pharmaceutical composition of claim 48, wherein said peptide fragment consists essentially of ~~three to~~ six repeats of the hexameric sequence represented by SEQ ID NO: 1.

50. **(Previously presented)** The pharmaceutical composition of claim 1, wherein said elastin-based composition is derivatized by linkage to one or more additional chemical groups for promoting sustained release.

51-55. **(Cancelled)**

56. **(Currently amended)** The composition of any of claims 1, ~~2,~~ 8, 9, 60 or 67 ~~or 55~~, where said elastin-based composition is dissolved or suspended within a biocompatible polymer matrix, which matrix permits diffusion of the elastin-based composition, to form a sustained-release composition.

57. **(Previously presented)** The composition of claim 56, wherein the biocompatible polymer matrix is selected from the group consisting of polyester, a polylactide, degradable lactic acid-glycolic acid copolymers, and poly-D-(-) hydroxybutyric acid.

58. **(Previously presented)** The composition of claim 56, wherein the biocompatible polymer matrix is formulated for coating an implantable medical device.

59. **(Previously presented)** The composition of claim 56, wherein the biocompatible polymer matrix is formulated for coating a stent.

60. **(Currently amended)** A pharmaceutical composition that provides an elastin-based composition, said elastin-based composition comprising a polypeptide, wherein said polypeptide consists essentially of (i) an amino acid sequence at least 95% ~~90%~~ identical to SEQ ID NO: 3, (ii) a bioactive fragment of SEQ ID NO: 3 including ~~one to~~ six or seven repeats of the hexameric sequence represented in SEQ ID NO: 1, or (iii) a peptide fragment consisting essentially of ~~one to~~ six or seven repeats of the hexameric sequence represented by SEQ ID NO: 1, wherein said elastin-based composition is attached to a biocompatible support or dissolved in a biocompatible matrix and has one or more biological activities selected from the group consisting of:

a) inhibiting the proliferation of smooth muscle cells;

b) stimulating the differentiation of smooth muscle cells;

c) regulating the migration of smooth muscle cells; and

d) binding to smooth muscle cells, and

wherein said elastin-based composition has an IC50/EC50 for at least one of said biological activities that is less than or equal to 10^{-3}.

61. **(Currently amended)** The composition of claim 60, wherein said polypeptide consists essentially of (i) an amino acid sequence ~~at least 95%~~ identical to SEQ ID NO: 3, (ii) a bioactive fragment of SEQ ID NO: 3 that includes ~~one to~~ six or seven repeats of the hexameric sequence represented in SEQ ID NO: 1 or (iii) a peptide fragment consisting essentially of ~~one to~~ six or seven repeats of the hexameric sequence represented by SEQ ID NO: 1.

62. **(Currently amended)** The composition of claim 60, wherein said polypeptide consists essentially of (i) an amino acid sequence identical to SEQ ID NO: 3, (ii) a bioactive fragment of SEQ ID NO: 3 that includes ~~one to~~ seven repeats of the hexameric sequence represented in SEQ ID NO: 1, or (iii) a peptide fragment consisting essentially of ~~one to~~ seven repeats of the hexameric sequence represented by SEQ ID NO: 1.

63. **(Currently amended)** The composition of claim 60, wherein said bioactive fragment or peptide fragment includes ~~one repeat~~ six repeats of the hexameric sequence represented in SEQ ID NO: 1.

64. **(Cancelled)**

65. **(Currently amended)** The composition of claim 60, wherein said bioactive fragment or peptide fragment consists essentially of ~~one repeat~~ six repeats of the hexameric sequence represented in SEQ ID NO: 1.

66. **(Cancelled)**

67. **(Currently amended)** A pharmaceutical composition that provides an elastin-based composition, said elastin-based composition consisting essentially of a polypeptide, wherein said polypeptide consists essentially of (i) an amino acid sequence at least 95% ~~90%~~ identical to SEQ ID NO: 3, (ii) a bioactive fragment of SEQ ID NO: 3 that includes ~~one to~~ six or seven repeats of the hexameric sequence represented in SEQ ID NO: 1, or (iii) a peptide fragment consisting essentially of ~~one to~~ six or seven repeats of the hexameric sequence represented by SEQ ID NO: 1, wherein said elastin-based composition is attached to a biocompatible support or dissolved in a biocompatible matrix and has one or more biological activities selected from the group consisting of:

a) inhibiting the proliferation of smooth muscle cells;

b) stimulating the differentiation of smooth muscle cells;

c) regulating the migration of smooth muscle cells; and

d) binding to smooth muscle cells, and

wherein said elastin-based composition has an IC50/EC50 for at least one of said biological activities that is less than or equal to 10^{-3}.

68. **(Currently amended)** The composition of claim 67, wherein said polypeptide consists essentially of (i) an amino acid sequence ~~at least 95%~~ identical to SEQ ID NO: 3, (ii) a bioactive fragment of SEQ ID NO: 3 that includes ~~one to~~ seven repeats of the hexameric sequence represented in SEQ ID NO: 1, or (iii) a peptide fragment consisting essentially of ~~one to~~ seven repeats of the hexameric sequence represented by SEQ ID NO: 1.

69. **(Currently amended)** The composition of claim 67, wherein said polypeptide consists essentially of (i) an amino acid sequence identical to SEQ ID NO: 3, (ii) a bioactive fragment of SEQ ID NO: 3 that includes ~~one to seven~~ six repeats of the hexameric sequence represented in SEQ ID NO: 1, or (iii) a peptide fragment consisting essentially of ~~one to seven~~ six repeats of the hexameric sequence represented by SEQ ID NO: 1.

70-73. **(Cancelled)**